



MERCEDES-BENZ

Service

Maintenance Manual USA Model Year 1972–1980

Passenger Cars Volume 1

Daimler-Benz AG
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This Maintenance Manual contains maintenance jobs to be performed on Passenger Cars starting model year 1972 up to model year 1980.

Besides the detailed descriptions (both written and illustrated) of these jobs, all necessary checking and adjustment data as well as filling quantities, fuels, lubricants, and coolants, and information on required special tools and specified tightening torques are included.

Each individual maintenance job is assigned a number (position number) which may be found in the outer upper corner of the respective page, arranged in numerical sequence. The position number in the Maintenance Manual corresponds to the number in the Work Sheets and Maintenance Booklet so that, if necessary, when carrying out the maintenance jobs the corresponding texts and data can be immediately found.

The types or engines to which the work applies are listed below the position number. Information on the maintenance intervals during which the individual jobs should be carried out can be obtained from the tables at the beginning of the manual.

A listing of all maintenance jobs is supplied in the index which is arranged in sequence of the unit groups and respective subjects.

Daimler-Benz Aktiengesellschaft
Zentralkundendienst

January 1981

Model designation

	Sales Designation	Model	Engine Type Designation
Sedans	220 D	115.110	615.912
	240 D	115.117	616.916
	240 D	123.123	616.912
	300 D	115.114	617.910
	300 D	123.130	617.912
	300 TD	123.190	617.912
	300 SD	116.120	617.950
	220	115.010	115.920
	230	115.017	115.951
	230	123.023	115.954
	250	114.011	130.923
	280	114.060	110.921
	280 E	123.033	110.984 ¹⁾
	280 S	108.016	130.920
	280 S	116.020	110.922
	280 SE	108.018	130.980
	280 SE	116.024	110.985 ¹⁾
	280 SEL	108.019	130.980
	280 SE 4.5	108.067	117.984
	280 SEL 4.5	108.068	117.984
	300 SEL	109.016	130.981
	300 SEL 3.5	109.056	116.981
	300 SEL 4.5	109.057	117.981
	300 SEL 6.3	109.018	100.981
	450 SE	116.032	117.983/986 ¹⁾
	450 SEL	116.033	117.983/986 ¹⁾
	6.9	116.036	100.985 ¹⁾
	600	100.012	100.980
	600 long 4 doors	100.014	100.980
	600 long 6 doors	100.016	100.980
Coupés	250 C	114.023	130.923
	280 C	114.073	110.921
	280 CE	123.053	110.984
	280 SE	111.024	130.980
	280 SE 3.5	111.026	116.980
	300 CD	123.150	617.912
	450 SLC	107.024	117.982/985 ¹⁾
Convertibles	280 SE	111.025	130.980
	280 SE 3.5	111.027	116.980
Roadster	280 SL	113.044	130.983
	450 SL	107.044	117.982/985 ¹⁾

¹⁾ Engines with CIS (continuous injection system)

Engine, mechanical (00—20)	Job No.
Compression pressure, check	751
Cooling water level, check and correct	990
Cylinder head bolt, retighten	752
Engines 100.980/981	page 752.1
114 130	752.3
Engine oil change with filter care	151
Engines 100.980/981	page 151.05
100.985	151.10
110	151.15
114 130 180	151.20
115	151.25
116 117	151.30
615 616 617 up to model year 1976	151.35
616 617 starting model year 1977	151.41
617.950 starting model year 1978	151.45
Heating and venting system, check sealing	038
Hose clamps, check for tight fit	907
Renewing coolant with anti-freeze	991
Supplementary oil filter for hydraulic fan coupling, clean	156
Valve clearance, adjust	753
Engines 100 116 117	page 753.1
110	753.3
115 130	753.5
615 616 617	753.7
V-belts, check condition and tension	757
V-belts, retension	756
Engines 100.980	page 756.05
100.981	756.10
100.985	756.16
110 model year 1973—1976	756.21
starting model year 1977	756.23
114 130	756.29
115 model year 1972—1974	756.35
model year 1975—1976	756.36
starting model year 1977	756.37
116 117	756.55
615 616 617 model year 1972—1976	756.70
starting model year 1977	756.71
starting February 1979	756.72
.617.950 starting model year 1978	756.75
V-belts, check condition and retension, all engines, model year 1980	758
Slacken engine stop and tighten screws	759
Slacken engine stop	760

Note: The figures in () next to the titles are group numbers



Engine, combustion (07/09/47/49)

incl. control linkage, ignition, intake, fuel and exhaust system	
Air filter element, clean	202
Air filter element, replace, model year 1980	203
Air injection, check, model year 1974	765
Begin of delivery, checking, Engines 616 617	787
Carburetor flange, retighten	876
Catalyst, replace	767
Contact breaker points, renew	773
Dwell angle, check	781
Dwell angle and ignition timing, adjust	782
Engine control linkage and control shafts, lubricate	415
Engine control linkage, check	813
Exhaust gas recycling, check, model year 1973/1974	763
Exhaust gas turbo charger, retighten nuts	877
Exhaust system, retighten slip joints	951
Filter of auxiliary air valve, replace	806
Flame guard filament, clean	762
Fuel evaporation system in engine compartment, check, model year 1974	764
Fuel filter, clean/replace	847
Fuel filter element, replace	849
Fuel filter or filter element, replace	840
Fuel lines and hoses of electronically controlled fuel injection system, check for tight fit	891
Fuel main filter, clean/replace	845
Fuel prefilter, check	844
Fuel pump, clean strainer	851
Fuel pump, renew strainer	852
Fuel system, check condition and sealing	041
Heater flaps, clean and spray	785
Idle speed adjustment, check and adjust	797
Idle speed, check and adjust	798
check with CO measuring instrument and adjust	
Engine 100.985 110.984/985 117.985/986	
with CIS (continuous injection system) up to model year 1979;	
(model year 1980 see Job No. 799)	page 798.20
100 130	798.30
110 with Solex carburetor 4 A 1	798.35
115 with Stromberg carburetor	798.40
116 117 with electronically controlled gasoline injection system	798.50
130 with Zenith carburetor	798.55
Engines 615 616 617 up to model year 1979	798.15
Engines 616 617.912 model year 1980	798.16
Engine 617.950 model year 1980	798.17
Idle speed, check and readjust, model year 1980	799
check without CO measuring instrument and adjust	
Engine 110 117 model year 1980	
Idling speed stabilization, check, model year 1972	793
Ignition change-over, check	774
Ignition timing, check and adjust	772
Intake and exhaust manifolds and exhaust flange, check for tight fit	871

Oil-bath air filter, check and adjust oil level	101
Oil-bath air filter, clean	205
Oil level in damper of Stromberg carburetor, check and fill up	788
Oil level in injection pump, check	800
On-off ratio, readjust if necessary	776
Engines 110 117 model year 1980	
Oscillograph picture, evaluate / Check ignition system for condition	832
Oxygen sensor, replace	768
Engines 110 117 model year 1980	
Spark plugs, replace	770
Spark plugs. Check, replace if necessary	771
Engines 110 117 model year 1980	
Throttle valve, clean, model year 1974	766
Throttle valve lift / coasting conditions, check, model year 1972/1973/1974	796
Clutch (25)	
Clutch driven plate, check wear	501
Clutch operation, check condition and sealing	045
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Test drive — clutch operation and gear shift, check functioning	098
Manual transmission (26)	
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Oil level, check and correct	121
Test drive	098
Automatic transmission (27)	
Fluid level, check and correct	120
Oil change, automatic transmission	170
Oil filter for automatic transmission, replace	174
Test drive	098
Suspension (32)	
Air suspension system	
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Air filter, replace	470
Air suspension, check condition	087
Condensation from air reservoir, drain	466
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Fluid level in anti-freeze device, check and top-up	463
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Ball joints of connecting rods for level controller, check	629
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Pressure reservoir and central reservoir for gas filling pressure, check	628
Rubber sleeves of ball joints on tube shocks, check	020
System for leaks and condition, check	086

Contents

Job No.

Front axle (33)

Charge of front wheel bearing, renew grease, check tapered roller bearing (only type 116.036)	631
Fixing bolts of bearing pins for lower wishbones, retighten	922
Front axle, grease	250
Hub caps of front wheel bearings, renew grease	388
Joints for condition and leaks of rubber sleeves, check	028
Wheel bearing end play, adjust	630

Rear axle (35)

Detent for rear axle carrier, adjust	650
Front and rear axle, grease	250
Oil level, check, adjust	130
Oil change, rear axle	180

Wheels and wheel adjustment (40)

Spherical collar bolt of wheels, retighten	988
Tires, check, if required interchange wheels	982
Tire pressure, correct	987
Toe-in of front wheels, check	625
Vehicle level on vehicles with air suspension, (position of wishbone arms on front axle and rear wheel camber), check	622
Wheels, remove and refit, disc wheels, check	983

Propeller shaft (41)

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Brakes (42)

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Brake caliper pistons, check sealing and ease of movement and condition of dust caps (refer to job No. 712)	712
Brake discs, check and clean, remove brake pads for this purpose	712
Brake discs, check and clean (refer to job No. 712)	702
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Brake fluid, renew	701
Brake pads, remove, clean and check and/or replace (refer to job No. 712)	097
Brake system, bleed	711
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Fluid level of brake system, check and correct	706
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Ventilation bores on compressed air brake booster, clean	
Brake lines, check for damage	

Steering system (46)

Bolts and nuts for high pressure oil pump and support of power steering, retighten	920
Fixing screws, retighten	924
Fluid level of mechanical steering, check and correct	135
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Condition and sealing of comfort hydraulic system, check	023
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Fluid level of air conditioning, check	484
Perlon filter in fan wheel (front heater box), replace	497
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Body (60–98)

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Door locks, lubricate	393
Door weather seals, clean	492
Engine hood, lubricate	395
Mirror, outside (folding), lubricate	375

Maintenance Chart Model Years 1977-1979

	107.024		107.044		116.024		123.033 123.053		116.033		116.036			
Job. No.	1. Inspection at 300–600 miles	2. Inspection at 6,000 miles	Lubrication and brake inspection – every 6,000 miles	Maintenance – every 12,500 miles	Additionally every 37,500 miles	1. Inspection at 300–600 miles	2. Inspection at 6,000 miles	Lubrication and brake inspection – every 6,000 miles	Maintenance – every 12,500 miles	Additionally every 37,500 miles	1. Inspection at 300–600 miles	2. Inspection at 6,000 miles	Maintenance – every 12,500 miles	Additionally every 37,500 miles
009				●					●				●	
020									●				●	
025				●					●				●	
028				●					●				●	
029	This Job No. is contained in Job No. 025													
030					●				●				●	
038	●	●		●		●	●		●		●	●	●	●
041	●	●		●		●	●		●		●	●	●	●
086												●	●	●
097				●					●				●	●
098				●					●				●	●
099				●					●				●	●
120	●	●		●		●	●		●		●	●	●	●
130				●					●				●	●
134	●	●		●		●	●		●		●	●	●	●
139											●	●	●	●
151	●	●	●	●		●	●	●	●		●		●	●
170					●				●					●
174					●				●					●
180		●					●					●		
202				●					●				●	
350				●					●				●	
375				●					●				●	
388					●				●					
393				●					●				●	
395				●					●				●	
415		●	●	●			●	●	●			●	●	●
465	●	●		●		●	●		●		●	●	●	●
484		●		●			●		●			●	●	●
625					●						●			●
628														●
629	Deleted as result of technical progress													
630		●					●						●	
631														●
700	●			●		●			●		●		●	
702 ¹⁾					●				●					●
703	This Job No. is contained in Job No. 712													
706				●					●				●	
707	This Job No. is contained in Job No. 712													
708	This Job No. is contained in Job No. 712													
709	This Job No. is contained in Job No. 712													
711		●	●			●	●		●			●		
712				●					●				●	
714				●					●				●	
753						●			●					
756	●					●			●		●			

Maintenance Chart Model Years 1977-1979

Job. No.	107.024 107.044					116.024 123.033 123.053					116.033					116.036				
	1. Inspection at 300-600 miles	2. Inspection at 6,000 miles	Lubrication and brake inspection - every 6,000 miles	Maintenance - every 12,500 miles	Additionally every 37,500 miles	1. Inspection at 300-600 miles	2. Inspection at 6,000 miles	Lubrication and brake inspection - every 6,000 miles	Maintenance - every 12,500 miles	Additionally every 37,500 miles	1. Inspection at 300-600 miles	2. Inspection at 6,000 miles	Lubrication and brake inspection - every 6,000 miles	Maintenance - every 12,500 miles	Additionally every 37,500 miles	1. Inspection at 300-600 miles	2. Inspection at 6,000 miles	Maintenance - every 12,500 miles	Additionally every 37,500 miles	
757				●					●					●				●		
759						● 2)													●	
760							● 2)													
767										● 3)										
770				●					●					●				●		
772	●			●		●			●		●			●		●		●		
798	●			●		●			●		●			●		●		●		
813		●	●	●			●	●	●			●	●	●		●	●	●		
821		●		●			●		●			●		●			●	●		
832				●					●					●				●		
847					●					●					●				●	
871	●				●	●				●	●				●	●			●	
905	●					●					●					●				
907	●					●					●					●				
924	●			●		●			●		●			●		●		●		
951	●					●			●		●			●		●		●		
982				●					●					●				●		
983				●					●					●				●		
987	●			●		●			●		●			●		●		●		
988	●					●			●		●			●		●		●		
990	●	●		●		●	●		●		●	●		●		●	●	●		
991 4)					●					●					●				●	

1) This job is to be carried out once a year, preferably in spring

2) Only model 123.033

3) Only models 123.033 and 116.024 with California emission control system. This job is to be carried out once at 37,500 miles

4) This job is to be carried out every two years



Maintenance Chart Model Years 1977–1979

Job. No.	116.120					123.023*					123.130	123.150	123.190	123.123				
	1. Inspection at 300–600 miles	2. Inspection at 4,000 miles Lubrication every 4,000 miles	Maintenance – every 12,500 miles	Additionally every 37,500 miles		1. Inspection at 300–600 miles	2. Inspection at 6,000 miles Lubrication and brake inspection – every 6,000 miles	Maintenance – every 12,500 miles	Additionally every 37,500 miles		1. Inspection at 300–600 miles	2. Inspection at 3,000 miles Lubrication – every 3,000 miles Lubrication and brake inspection – every 6,000 miles	Maintenance – every 12,500 miles	Additionally every 37,500 miles	1. Inspection at 300–600 miles	2. Inspection at 3,000 miles Lubrication – every 3,000 miles Lubrication and brake inspection – every 6,000 miles	Maintenance – every 12,500 miles	Additionally every 37,500 miles
009			•					•					•				•	
025			•					•					•				•	
028			•					•					•				•	
029	This Job. No. is contained in Job. No. 025																	
030				•					•				•					•
038	•	•	•			•	•	•			•	•	•		•	•	•	
041	•	•	•			•	•	•			•	•	•		•	•	•	
045			•					•					•		•		•	
085			•					•			•	•	•		•	•	•	
097			•					•					•				•	
098			•					•					•				•	
099			•					•					•				•	
120	•	•	•			•	•	•			•	•	•		•	•	•	
121			•					•					•				•	
130			•					•					•				•	
134	•	•	•			•	•	•			•	•	•		•	•	•	
138		•	•					•			•	•	•		•	•	•	
151	•	•	•			•	•	•			•	•	•		•	•	•	
170			•					•					•		•		•	
171				•				•					•		•		•	
174			•					•					•		•		•	
180		•					•				•	•	•		•	•	•	
202			•					•					•				•	
205			•					•					•			•	•	
350			•					•					•				•	
375			•					•					•				•	
388			•					•					•				•	
393			•					•					•				•	
395			•					•					•				•	
415		•	•				•	•			•	•	•		•	•	•	
465	•	•	•			•	•	•			•	•	•		•	•	•	
484		•	•				•	•			•	•	•		•	•	•	
501			•					•					•				•	
510			•					•					•				•	
625			•					•					•		•		•	
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650								•					•				•	
700	•		•			•		•			•	•	•		•		•	
702 ¹⁾			•					•					•				•	
703	This Job No. is contained in Job No. 712																	
706			•					•					•				•	
707	This Job No. is contained in Job No. 712																	
709	This Job No. is contained in Job No. 712																	
711			•			•	•	•				•	•			•	•	
712			•					•					•				•	
714			•					•					•				•	

Maintenance Chart Model Years 1977-1979

Job. No.	116.120					123.023 *					123.130	123.150	123.190	123.123								
	1. Inspection at 300–600 miles	2. Inspection at 4,000 miles	Lubrication every 4,000 miles	Maintenance – every 12,500 miles	Additionally every 37,500 miles	1. Inspection at 300–600 miles	2. Inspection at 6,000 miles	Lubrication and brake inspection – every 6,000 miles	Maintenance – every 12,500 miles	Additionally every 37,500 miles	1. Inspection at 300–600 miles	2. Inspection at 3,000 miles	Lubrication – every 3,000 miles	Lubrication and brake inspection – every 6,000 miles	Maintenance – every 12,500 miles	Additionally every 37,500 miles	1. Inspection at 300–600 miles	2. Inspection at 3,000 miles	Lubrication – every 3,000 miles	Lubrication and brake inspection – every 6,000 miles	Maintenance – every 12,500 miles	Additionally every 37,500 miles
753	•			•		•			•		•				•		•				•	
756	•					•					•						•					
757				•					•						•						•	
759						•					•						•					
760							•					•						•				
770									•												•	
772						•																
773									• ⁴⁾													
781									• ⁵⁾													
782									• ⁵⁾													
785									•													
787 ²⁾				•											•						•	
788							•	•	•													
797	•			•					•		•				•		•				•	
798	•			•		•			•		•				•		•				•	
800																		•			•	
813		•	•	•			•	•	•			•	•	•	•			•	•	•	•	
821		•		•			•		•			•			•			•			•	
832									•													
844					•											•						•
845					•											•						•
871	•				•	•				•	•				•		•				•	
876						•				•												•
877	•																					
895	•			•							•				•		•				•	
905	•					•					•						•					
907	•					•					•						•					
924	•			•		•			•		•				•		•				•	
951	•					•					•				•		•					
982				•					•						•						•	
983				•					•						•						•	
987	•			•		•			•		•				•		•				•	
988	•					•					•				•		•					
990	•	•		•		•	•		•		•	•			•		•	•			•	
991 ³⁾					•					•						•						•

- 1) This job is to be carried out yearly if possible in spring
 2) This job is only to be carried out at 12,500 miles
 3) This job is only to be carried out every 2 years
 * This model is no longer sold as of model year 1979

- 4) Engines with breakerless transistorized ignition
 5) Except engines with breakerless transistorized ignition

